



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,312	11/10/2003	Ricky Dion Barnes	5198-001	4460
24112	7590	12/01/2005	EXAMINER	
COATS & BENNETT, PLLC P O BOX 5 RALEIGH, NC 27602			CHYN, AILEEN	
			ART UNIT	PAPER NUMBER
			3715	

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,312

Applicant(s)

BARNES ET AL.

Examiner

Aileen Chyn

Art Unit

3715

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/10/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7, 14-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The limitations of the method cannot be practiced without the physical incorporation of a human being, claim 1, line 6, "attaching a sensor to a person", claim 14, line 1, "placing...to a trainee" wherein "trainee" is analogous to a human being, and hence non-statutory.

35 U.S.C. 101 2105 [R-1] Patentable Subject Matter — Living Subject Matter

In view of this decision, the Office has issued these guidelines as to how 35 U.S.C. 101 will be interpreted.

If the broadest reasonable interpretation of the claimed invention as a whole encompasses a human being, then a rejection under 35 U.S.C. 101 must be made indicating that the claimed invention is directed to nonstatutory subject matter. Furthermore, the claimed invention must be examined with regard to all issues pertinent to patentability, and any applicable rejections under 35 U.S.C. 102, 103, or 112 must also be made.

Therefore, the aforementioned claims are deemed to be non-statutory

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-8, and 12-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Yarnall, Sr. et al., "Yarnall" (U.S. Patent No. 4,745,882).

With respect to claim 1, Yarnall discloses a method...comprising:

forming a safety zone comprising a signal that forms at least one boundary (Abstract, "...signal-broadcasting wire loops is used...to define the desired confinement area", wherein "CONFINEMENT AREA" is analogous to "BOUNDARY");

attaching a sensor..., the sensor detecting the signal when it comes within a predetermined distance (Abstract, "As the animal approaches the inner wire loop, a receiver worn by the animal will pick up the broadcasted signal...");

placing the person and the sensor within the safety zone and performing training exercises requiring the person to remain within the safety zone (Figure 1, col. 3, lines 34-36, "In most cases, the use of...the audio signal will be sufficient to cause the animal to move away from the edge of the confinement area..." and col. 1, lines 67 to col. 2, lines 1-7, "...an electric confinement arrangement for animals...transmit an alarm...if the animal ignores the deterrent and leaves the confinement area" wherein, "CONFINEMENT AREA" is analogous to "SAFETY ZONE"; col. 5, lines 59-62, "permits the owner or trainer to communicate with the animal...so as to command the animal to

Art Unit: 3715

return to confinement”, wherein “COMMAND” by the trainer is analogous to “TRAINING EXERCISES”);

maintaining the sensor in a deactivated orientation....and activating an alarm when the sensor is within the predetermined distance from the signal (Abstract, “As the animal approaches...a receiver will pick up the broadcasted signal and give the animal a mild shock and/or emit an unpleasant noise...this signal will trigger an alarm located at the base station”, wherein “MILD SHOCK AND/OR UNPLEASANT NOISE” is analogous to “ACTIVATING AN ALARM” and it is inferred that the alarm is “DEACTIVATED” before “ACTIVATION” by maintaining a predetermined distance from the signal.

Claim 2 is rejected for the reasons set forth hereinabove for claim 1 and furthermore Yarnall discloses a method wherein the step of activating the alarm occurs when the person exits the safety zone (Abstract, “If the animal ignores these deterrents and continues to move out of the confinement area...this signal will trigger an alarm”, wherein “MOVE OUT” is analogous to “EXIT” and “CONFINEMENT AREA” is analogous to “SAFETY ZONE”).

Claim 3 is rejected for the reasons set forth hereinabove for claim 1 and furthermore Yarnall discloses a method wherein activating the alarm comprises sounding an audible alarm that... can be heard...(Abstract, “As the animal approaches...a receiver will pick up the broadcasted signal and ...emit an unpleasant noise...” and “trigger an alarm located at a base station”, wherein the “UNPLEASANT NOISE” and the “ALARM...BASE STATION” are both AUDIBLE ALARMS”).

Claims 4 and 5 are rejected for the reasons set forth hereinabove for claim 1 and furthermore Yarnall discloses a method wherein the safety zone comprises positioning the signal at the predetermined vertical height and adjusting the vertical height of the signal during training exercises (Figure 1 and col. 3, lines 4-5, "Loops 12 and 14 may be either above or below ground...", wherein the "ABOVE OR BELOW GROUND" is analogous to any "PREDETERMINED VERTICAL HEIGHT" and it is implied that when the loops are above ground, then the height is adjustable; col. 3, lines 1-2 "...desired to keep a dog from leaving a designated area"; col. 7, lines 31-33, "transmitting voice commands from the trainer and....broadcasting such commands audibly to the animal", wherein the desire to confined the animal to a designated area and initiate "COMMANDS" from the trainer is analogous to "TRAINING").

Claim 7 is rejected for the reasons set forth hereinabove for claim 1 and furthermore Yarnall discloses a method wherein the signal is...radiofrequency...(col. 2, lines 34-36, "...carried by radio transmission and received and broadcast audibly to the animal" and col. 5, lines 25-32, "The filtered alarm activation signal...of the predetermined broadcast frequency (50 KHz for example)").

Claim 8 is rejected on the grounds of claim 1 and furthermore Yarnall discloses a method comprising the steps of:

activating an emitter to emit a signal (col. 2, lines 8-10, "...a pair of signal-emitting wire loops in a concentric arrangement and a receiver worn by the animal..." and col. 4, lines 40-42, "When the animal is within the signal field of the inner loop (wire

Art Unit: 3715

12), receiver 20 will activate a transmitter in the collar. This new signal F(c) , may be, perhaps, 70 KHz.” Wherein the “WIRE LOOP” is analogous to “EMITTER”); and

adjusting an orientation of the emitter relative to an adjuster...placing the signal to form a first boundary of the safety zone and changing the position of the signal and adjusting the dimensions of the safety zone during training exercises (Fig. 1 depicts poles or wooden sticks into the ground, attached to the emitters in 2 loops, wherein, the depicted poles is analogous to “ADJUSTER”, wherein the signal-emitting loops can be placed in different vertical heights relative to the depicted poles and “DEFINE THE PERIMETER OF THE DESIGNATED AREA” is analogous to “BOUNDARY OF THE SAFETY ZONE”; col. 3, lines 1-2, “...desired to keep a dog from leaving a designated area”; col. 6, lines 31-33, “...first alarm device 130, such as a flashing LED, which tells the trainer that the animal is approaching loop 12...” wherein the desire to confined the animal to a designated area, to manipulate an animal, as directed by a “TRAINER” is defined as “TRAINING”).

Claims 12 and 13 are rejected for the reasons set forth hereinabove for claim 8 and on the grounds corresponding to the reasons given above for claims 1 and 2, wherein person is attached to a sensor.

Claim 14 is rejected on the grounds corresponding to the reasons given above for claims 1 and 8, wherein the “TRAINEE” is analogous to “PERSON” and furthermore Yarnall discloses the method of deactivating the alarm after a predetermined time period from when the trainee reenters into the safety zone (col. 6, lines 51-54, “This tells the trainer that the animal has escaped the system and the system is deactivated so as

Art Unit: 3715

to prevent shock to the animal when it reenters the confinement", wherein the "ANIMAL" is analogous to "TRAINEE").

Claim 15 is rejected for the reasons set forth hereinabove for claim 14 and furthermore Yarnall discloses a method wherein stopping the alarm when the sensor no longer receives the signal (abstract, "The arrangement further includes circuits for automatically deactivating the...noise devices after the animal escapes..."; and col. 2, lines 51-53, "FIG. 5 illustrates an exemplary alarm and transmitter deactivation circuit combination at the home base of the arrangement of FIG. 1", wherein the "NOISE DEVICES" is analogous to "ALARM").

Claim 16 is rejected for the reasons set forth hereinabove for claim 14 and furthermore Yarnall discloses a method comprising remotely positioning the alarm from the sensor (abstract, "As the animal approaches...a receiver worn by the animal will pick up the broadcast signal...its receiver will pick up the signal emitted by the outer wire, where this signal will trigger an alarm located at a base station (the owner's home)...", wherein the alarm is located at the base station and the "RECEIVER" which is analogous to "SENSOR" is located with the animal in the confinement area). Claim 17 is rejected for the reasons set forth hereinabove for claim 14 and furthermore Yarnall discloses a method placing a plurality of sensors on the trainee (col. 2, lines 51-53 and "FIG. 5 illustrates an exemplary alarm and transmitter deactivation circuit combination at the home base of the arrangement of FIG. 1"; lines 60-54, "FIG. 8 illustrates an exemplary receiver circuit included in the animal's receiver for receiving and audibly broadcasting to the animal the owner's voice commands. "; abstract, wherein there are

Art Unit: 3715

multiple sensors on the trainee including a sensor to pick up the broadcasted signal from the inner loop and give the animal a shock or noise and a sensor to pick up the broadcasted signal from the outer loop to alert the owner with an alarm).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 9-11, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yarnall, Sr. et al., "Yarnall" (U.S. Patent No. 4,745,882) in view of Dando, "Dando" (U.S. Patent No. 6,127,926).

Claim 6 is rejected for the reasons set forth hereinabove for claim 4, however, Yarnall does not explicitly disclose the method comprising positioning redirecting elements to reflect the signal to increase the safety zone.

Dando discloses positioning redirecting elements to reflect the signal into additional areas (col. 2, lines 28-31, "At microwave frequencies scaffold netting and sheeting affects reflection, thus leading to variations in the effective surface level. "; col. 5, lines 65-67 to col. 6, lines 1-5, "... a reflected active infra-red beam transceiver is incorporated within the device. This transceiver, itself basically constructed according to prior art technology, transmits an active infra-red beam to a reflector and the reflector directs the signal back to the transceiver producing a continuous track. The transceiver

and reflector are positioned to represent the approximate centre line and length of the detection field.”; col. 5, lines 10-12, “In this embodiment, the length can be changed only in fixed patterns by changing of lens or mirror segments.”; and Figure 20, wherein the “INTRA-RED BEAM” is analogous to “SIGNAL” and the “REFLECTOR” and “LENS OR MIRROR SEGMENTS” are analogous to “REDIRECTING ELEMENTS” positioned as depicted in Figure 20 to reflect the signal to increase the safety zone or “LENGTH” by producing a continuous track.);

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of redirecting elements to reflect the signal into additional areas of the intrusion sensing system as disclosed by Dando into the method for electronic confinement as disclosed by Yarnall to provide sensors detectors for the use in protecting vertical surfaces (col. 1, lines 7-8) and to cover enough area such that the intruder cannot walk, run, crawl through the boundary undetected by minimizing his cross-sectional body parts. (col. 2, lines 8-10). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Claims 9 and 10 are rejected for the reasons set forth hereinabove for claim 8 and furthermore Yarnall discloses the step of changing the position...comprises vertically moving the emitter along the adjuster (col. 3, lines 4-5, “Loops 12 and 14 may be either above or below ground...”, Figure 1 depicts the poles holding up the emitter in 2 loops around the perimeter of the designated area, wherein the poles are the adjuster and the emitter can be vertically moved along the adjuster).

Art Unit: 3715

However, Yarnall does not explicitly disclose the aspect of adjusting the dimension of the safety zone by vertically moving the emitter along the adjuster and placing the adjuster and emitter within a central section of the safety zone and rotating the emitter about the adjuster to establish the first boundary.

Dando discloses ...

adjusting the dimension of the safety zone by vertically moving the emitter along the adjuster (claim 9) (Figure 9 and 10, col. 4, lines 33-39, "This aspect of the invention is based upon research to protect areas of scaffold of less than 10 m (33 ft). The operational range of the preferred embodiments is from 0.50 m (1.6 ft) to 15 m (50 ft). The detector can be designed to fulfill the need to protect scaffold 'end' faces, gantries, hoists, scaffold towers and other scaffold runs of less than about 10 m (33 ft)."; col. 5, lines 6-7, " The Doppler microwave detection pattern and a special passive infra-red curtain detection pattern comprising one or more curtains are preferably identical, up to a maximum range of, e.g., approx. 15 m (50 ft)." Wherein the scaffold pole is the "ADJUSTER" and element 64 depict the intruder detectors, and the operational range implies adjusting the dimension of the safety zone.); and

placing the adjuster and emitter within a central section of the safety zone and rotating the emitter about the adjuster to establish the first boundary (claim 10) (Figure 9, 10, and 17, depicts placing the adjuster (scaffolding) and emitter (intruder detectors) within the central section of the safety zone; Figures 17, 21 and 22 depict rotating the emitter about the adjuster to establish the first boundary by FIG. 17 by circular polarization).

Art Unit: 3715

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of adjusting the dimension of the safety zone by vertically moving the emitter along the adjuster and placing the adjuster and emitter within a central section of the protected area and rotating the emitter about the adjuster to establish the first boundary of the protected area as disclosed by Dando into the method for electronic confinement as disclosed by Yarnall to provide an invisible wall of energy from 0.5 m (1.6 ft) to 150 m (500 ft) wherein the width and height of the protective energy field must not be defined or overcome...(col. 10, lines 42-46) and to provide a large aperture linear array provided with circular polarization. (col. 16, lines 15-17) . One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Claim 11 is rejected for the reasons set forth hereinabove for claim 8 and furthermore Yarnall discloses the method of placing the adjuster and the emitter along an edge of the safety zone (Figure 1, and abstract, "...signal-broadcasting wire loops...define the desired confinement area...", wherein "CONFINEMENT AREA" is analogous to "SAFETY ZONE", the poles depicted in the Figure are analogous to the "ADJUSTER" and the "SIGNAL-BROADCASTING WIRE" is analogous to "EMITTER");

However does not explicitly disclose the aspect of positioning the signal to extend across an upper vertical boundary of the safety zone.

Dando discloses the method wherein the signal extends across an upper vertical boundary of the safety zone (Figures 9 and 10 both depict a signal that is across the entire vertical boundary of the safety zone; abstract, "Vertical surface protection in a

Art Unit: 3715

...beam sent from transmitter to a receiver, both installed substantially above the ground and adjacent to the vertical surface.”; “; col. 5, lines 65-67 to col. 6, lines 1-5, “... a reflected active infra-red beam transceiver is incorporated within the device... transmits an active infra-red beam to a reflector and the reflector directs the signal back to the transceiver producing a continuous track.”, wherein “CONTINUOUS TRACK” across, is analogous to “ACROSS THE UPPER VERTICAL BOUNDARY”).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the method of positioning the signal to extend across an upper vertical boundary of the protected area as disclosed by Dando into the method for electronic confinement as disclosed by Yarnall to provide protection of vertical surfaces (col. 1, lines 7-8) and to detect the intruder by the sensor by climbing above the sensor (col. 2, lines 24-25) . One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Claims 18 is rejected on the grounds corresponding to the reasons given above for claims 1, 4, 8 and 14, wherein the “RECEIVER” is analogous to “SENSOR” and is also rejected for the reasons set forth hereinabove for the same limitations as set forth above in claim 11 and therefore the examiner maintains the same line of reasoning.

Dando discloses transmitting an alarm when the receiver is positioned above the predetermined height (col. 2, lines 42-54, “The two curtain infrared detectors are mounted horizontally, preferably 30 cm to 100 cm (12 to 39 inches) apart, and mounted raised up, preferably by at least 50 cm (20 inches), most preferably approximately at the level of the first boarded (or unboarded) lift, which is typically at around 2 meters (six

Art Unit: 3715

feet six inches) above ground level, on the outer face of the scaffold. In this mode the twin curtain coverage pattern combined with a unique primer trigger operating in conjunction therewith via stored timers will only detect a climbing intruder ... An alarm condition occurs when the climbing intruder crosses both curtains of the detection pattern within a variable time limit.");

Claim 19 is rejected for the reasons set forth hereinabove for claim 18 and on the grounds of claim 14, (Yarnall, col. 6, lines 51-54) and is also rejected for the reasons set forth hereinabove for the same limitations as set forth above in claim 11

Dando discloses a method wherein the when the alarm is silenced after a return of a predetermined height (col. 12, lines 63-64, "The 24 hour keyholding/alarm reset service to be contacted where required.", wherein the intruder is analogous to "RECEIVER" and after the alarm is activated, it is inherent the intruder will be alerted and escape the protected area, therefore dropping out of a predetermined height and the alarm is reset).

Claim 20 is rejected for the reasons set forth hereinabove for claim 18 and on the grounds corresponding to the reasons given above for claim 17, wherein "PERSON" is analogous to "TRAINEE").

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Haase et al. (U.S. Pub. No. 2003/016495 A1);

Abita et al. (U.S. Pat. No. 5,838,238);

Art Unit: 3715

Runyon et al. (U.S. Pat. No. 6,323,773 B1);

West et al. (U.S. Pat. No. 6,208,260 B2);

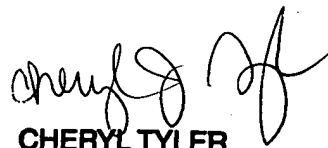
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aileen Chyn whose telephone number is 571-272-7176. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

24 November 2005
A.C.


CHERYL TYLER
SUPERVISORY PATENT EXAMINER